

**Remarks**

By the foregoing Amendment, claim 1 is amended, and new claims 10-16 are presented. No new matter is added by this Amendment. Support for these amendments is found at Paragraphs 00020-22 of the specification. Entry of the Amendment, and favorable consideration thereof, is earnestly requested.

The Examiner has rejected claims 1-8 under 35 U.S.C. §102(e) as anticipated by Sandberg '048, U.S. Patent Application No. US 2004/0124048, Sandberg '061, PCT Application No. WO 02/073061, and Severinsson, U.S. Patent No. 6,705,437. These rejections are respectfully traversed.

Additionally, the Examiner has rejected claims 1-9 under 35 U.S.C. 35 U.S.C. §103 as obvious over Dagh, U.S. Patent No. 5,507,367, or Bodin, U.S. Patent No. 5,540,303, or Dagh, U.S. Patent No. 5,568,846, or Dagh, U.S. Patent No. 6,330,937, or Gotti, U.S. Patent Application No. US 2004/0050632, at the time of the invention in view of Casey, U.S. Patent No. 4,844,206. Additionally, the Examiner has rejected claims 1-9 under 35 U.S.C. 35 U.S.C. §103 as obvious over Bunker, U.S. Patent No. 6,705,434, at the time of the invention in view of Casey, U.S. Patent No. 4,844,206 and Brooks, U.S. Patent No. 3,705,641. These rejections are respectfully traversed.

**Sandberg '048 and '061 Applications**

Applicant respectfully notes that the Sandberg applications are not properly applied as prior art. As the Examiner has noted, Sandberg '048 has an effective prior art date of March 12, 2002, and Sandberg has an effective prior art date of March 13, 2002. The present application, however, claims priority back to July 2, 2001, the filing date of the original Swedish application.



Additionally, even if these applications were applied as prior art, they would not anticipate or render obvious independent claim 1, as amended, for the reasons explained below with respect to the remaining references.

### **The Remaining References**

The Examiner has also rejected independent claim 1 on the basis of the following prior art:

- Severinsson
- Dagb '367 or Bodin or Dagb '846 or Dagb '937 or Gotti *in combination with* Casey
- Bunker *in combination with* Casey and Brooks (U.S. Patent No. 3,705,641)

Applicant respectfully submits that the Examiner has cited the above references to illustrate general similarities between these various prior art designs and the present invention. The present invention, however, has a specific structure, which is aimed at achieving several objectives, including providing a structure with a reduced number of parts that both allows easy maintenance/replacement of the brake discs and also protects the bearing means from overheating. Therefore, claim 1 of the present application includes several limitations, listed below, that result in a device that achieves these objectives. Applicant respectfully submits that the Examiner has not addressed these limitations, and that it is improper to reject the claims based on prior art that does disclose these specific limitations.

#### Outer periphery straight and parallel with axle

Applicant respectfully submits that the Examiner has improperly dismissed this limitation, stating: "the sleeves of the references while not totally having a straight outer



periphery are substantially straight which appears to meet the claimed recitation of claim 1...". This specific limitation is not trivial, as it facilitates maintenance and replacement of the brake discs, which is a primary objective of the present invention. By employing a sleeve having a generally straight outer periphery, the brake discs slidably positioned on the sleeve can be easily replaced from the front side of the wheel by unscrewing the bolts 3, removing the wheel with the wheel flange 1, and then removing the discs and replacing them with new ones. See Paragraphs 00020, 00023, Fig. 1. Though applicant believes it is unnecessary, claim 1 has been slightly amended to further clarify this. Support for this amendment is found in Paragraph 00020 of the specification.

This ability to remove the discs in either axial direction does not exist with the funnel-shaped and non-straight hubs in the prior art. The Examiner has not indicated how this limitation is shown in any of the cited references. This feature is significant for achieving one of the stated objectives of the present invention, and it is improper to reject the claims on the basis of a prior art reference that does not specifically disclose this limitation without some specific suggestion in the reference to do so. *In re Mills*, 916 F.2d 680, 682, 16 USPQ2d 1430, 1432 (Fed. Cir. 1990) (fact that prior art "may be capable of being modified to run the way the apparatus is claimed, there must be some suggestion or motivation in the reference to do so."); MPEP 2143.01.

#### Groove

Applicant notes that the Examiner has not addressed this limitation. This specific limitation is significant, as it serves to protect the bearing means placed between the inner wall 7 of the sleeve and the wheel axle against overheating. Again, the Examiner has not indicated how this limitation is shown in any of the cited references, and it is improper to reject the claims on the basis of references that do not disclose this limitation. Additionally, Applicant respectfully submits that it is improper to assert that certain limitations are obvious without pointing to some suggestion in the references to



modify the design in that way. In order for the claimed invention to be obvious over the prior art, there must be some suggestion or motivation in the reference to make the relevant modification. *In re Mills*, 916 F.2d at 682; MPEP 2143.01.

### **Newly Added Claims**

Additionally, Applicant has presented new claims 10-11 (as well as claims 12-16), which further distinguish the specific structure of the present invention from the designs existing in the prior art. Specifically, new claim 10 positively recites the feature of a shortened inner wall, which is a significant aspect of the invention because it decreases the amount of friction between the sleeve and axle and increases the exposure of air thereto, thereby further reducing the risk of overheating. New Claim 11 positively recites the feature of bridges between the inner and outer walls of the sleeve, which is an important aspect of the invention because it adds further structural integrity to what is the limited intermediary structure—which experiences both mechanical and thermal stress—between the axle/wheel and the brake discs.

It is respectfully submitted that claims 1-16, all of the claims remaining in the application, are in order for allowance, and early notice to that effect is respectfully requested.



Respectfully submitted,

A handwritten signature in black ink, appearing to read 'W. Whitmyer, Jr.', is written over a horizontal line.

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